# Financial supervisory architecture: what has changed after the crisis?

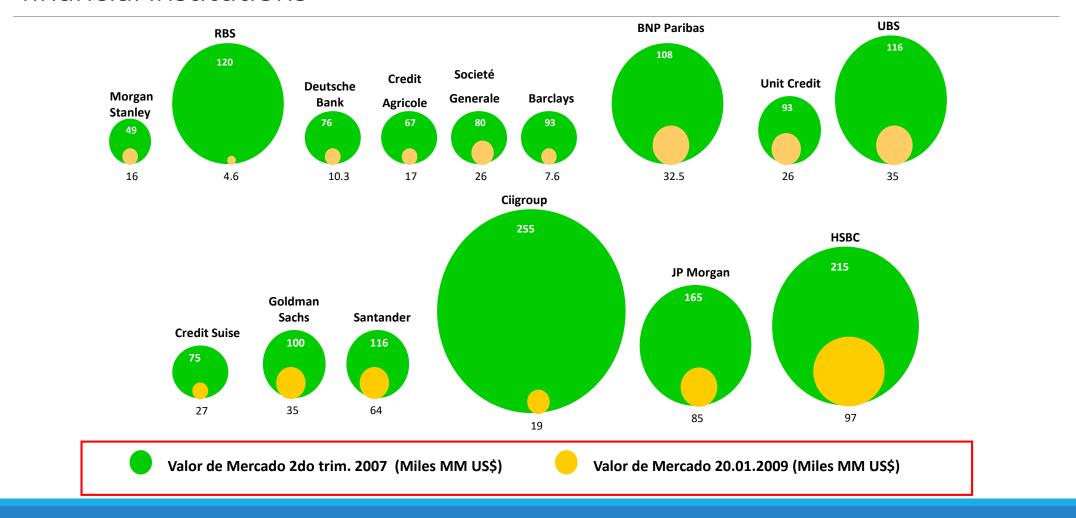
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# Índice

- I. International Financial Crisis
- II. Financial sector supervisory models concepts and evolution
- III.Post-crisis financial supervisory models
- IV.Micropudential models
- V.Macroprudential policy
- VI. Financial supervisory architecture in the EU and USA
- VII.Conclusion

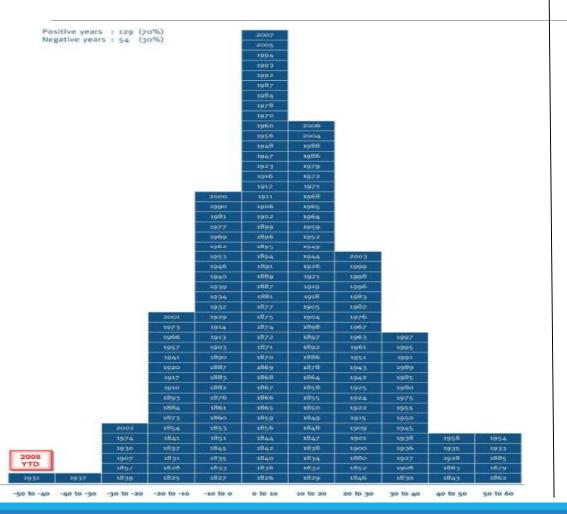
### I. International Financial Crisis

# Financial crisis significantly impacted market value of international financial institutions



**Source: Bloomberg** 

#### **S&P500:** One of the worst years



Si hace UN AÑO ATRÁS usted hubiera invertido US\$ 1.000 en acciones de ... al 15 de octubre del 2008 ...

Empresas en Crisis	Le Quedó US\$	Pérdida %		
₹ FannieMae	32,9	96,7		
AIG	20,3	98,0		
Freddie Mac We make home possible*	6,3	99,4		
LEHMAN BROTHERS	3,2	99,7		

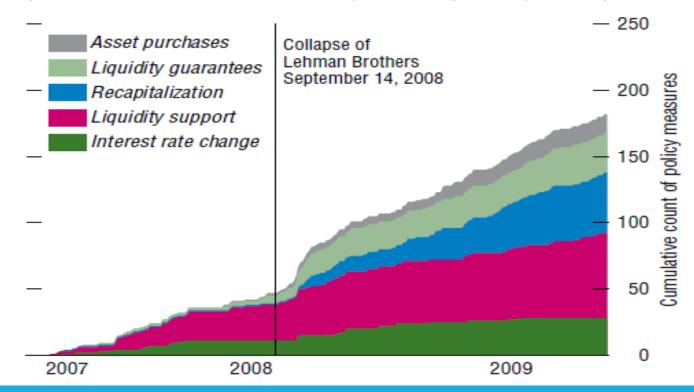
Exposición al riesgo inmobiliario: España 65% (36% titulizada), Japón y Australia 60%, Alemania 45%, EEUU 35%, UK 20%.

Elaboración: MAXIMIXE

#### Intervention measures during the crisis

Figure 3.1. Time Pattern of Crisis Measures in Sample Countries

(June 1, 2007-June 30, 2009; only front-page policy events)



### Financial regulators response

- Basel III (Capital and liquidity)
- Macroprudential policy
- Resolution of financial institutions
- Conduct of business

#### Basel Committee on Banking Supervision reforms – Basel III

Strengthens microprudential regulation and supervision, and adds a macroprudential overlay that includes capital buffi

		Capital				Liquidity
		Pillar 1		Pillar 2	Pillar 3	
	Capital	Risk coverage	Containing leverage	Risk management and supervision	Market discipline	Global liquidity standards and supervisory monitoring
All Banks	Quality and level of capital  Raising minimum common equity to 4.5% of risk-weighted assets, after deductions.  A capital conservation buffer comprising common equity of 2.5% of risk-weighted assets brings the total common equity standard to 7%. Constraints on a bank's discretionary distributions will be imposed when it falls into the buffer range.  A countercyclical buffer within a range of 0.25% comprising common equity will apply when credit growth is judged to result in an unacceptable build-up of systematic risk.  Capital loss absorption at the point of non-viability Allowing capital instruments to be written off or converted to common shares if the bank is judged to be non-viable. This will reduce moral hazard by increasing the private sector's contribution to resolving future banking crises.	Revisions to the standardised approaches for calculating  credit risk;  market risk;  credit valuation adjustment risk; and  operational risk  mean greater risk-sensitivity and comparability.  Constraints on using internal models aim to reduce unwarranted variability in baries' calculations of risk-weighted assets.  Counterparty credit risk  More stringent requirements for measuring exposure; capital incentives to use central counterparties for deinvatives; a new standardised approach; and higher capital for inter-financial sector exposures.  Securitisations  Reducing reliance on external ratings, simplifying and limiting the number of approaches for calculating capital charges and increasing requirements for riskier exposures.  Capital requirements for exposures to central counterparties (CCPs) and equity investments in funds to ensure adequate capitalisation and support a resilient financial system.  A revised output floor, based on Basel III standardised approaches, limits the regulatory capital benefits that a barik using internal models can derive relative to the standardised.	A non-risk- based leverage ratio including off-balance sheet exposures is meant to serve as a backstop to the risk-based capital requirement. It also helps contain system- wide build-up of leverage.	Supplemental Pillar 2 requirements address firm-wide governance and risk management, including the risk of off-balance sheet exposures and securifisation activities, sound compensation practices, valuation practices, valuation practices, stress testing, corporate governance and supervisory colleges.  Interest rate risk in the banking book (IRRBB) Extensive guidance on expectations for a bank's IRRBB management process: enhanced disclosure requirements; stricter threshold for identifying outlier banks; updated standardised approach.	Revised Pillar 3 disclosure requirements Consolidated and enhanced framework, covering all the reforms to the Basel framework. Introduces a dashiboard of banks' key prudential metrics.	The Liquidity Coverage Ratio (LCR) requires barles to have sufficient high-quality fiquid assets to withstand a 30-day stressed funding scenario that is specified by supervisors.  The longe-team, structural Net Stable Funding Ratio (NSFR) is designed to address liquidity mismatches. It covers the entire balance sheet and provides incentives for banks to use stable sources of funding.  The Committee's 2008 guidance Principles for Sound Liquidity Risk Management and Supervision takes account of lessons learned during the crisis. It is based on a fundamental review of sound practices for managing liquidity risk in banking organisations.  Supervisory monitoring The liquidity framework includes a common set of intraday and longerterm monitoring metrics to assist supervisors in identifying and analysing liquidity risk trends at both the bank and system-wide level.
		approaches.				Large exposures
6076	In addition to meeting the Basel III risk-l	cally important banks (G-SIBs) using a methodology th based capital and leverage ratio requirements, G-SIBs in m. The Committee also developed principles on the as aportant banks (D-SIBs).	ust have higher loss	absorbency capacity to refl	ect the greater	Large exposures regime established to mitigate systemic risks arising from interlinkages across financial institutions and concentrated exposures.

Source : BIS 7

#### Financial Stability Institute – FSI Insights

- Objective: analyze the evolution of the financial supervisory architecture since GFC
- Survey covering 82 jurisdictions
- Intitutional arrangements for financial sector oversight in:
  - Microprudential supervision
  - Macroprudential policies
  - Financial stability monitoring
  - Conduct of business supervision
  - Resolution of financial institutions

# II. Financial sector supervisory models – concepts and evolution

# Financial supervisory architecture requires a number of key institutional decisions

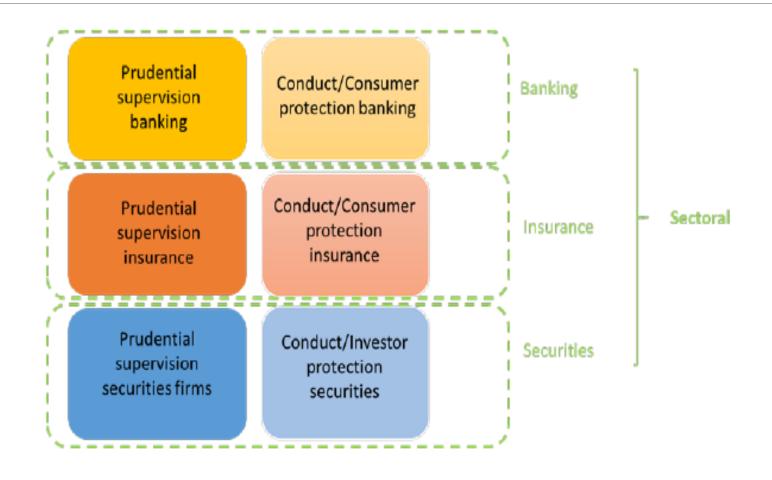
- Assigning specific functions to individual financial authorities
- Establishing coordination mechanisms
- Specifying approaches and arrangements to avoid potential conflicts of interest
- Rol of central banks in respect to financial sector oversigth

# Potential benefits and costs of attaching additional financial supervisory responsibilities to the microprudential banking supervisor

Functions added	Potential benefits	Potential costs		
+ Microprudential insurance	Similar required technical capacity Supervision of financial conglomerates	Potential confusion among beneficiaries of the safety net (deposit insurance)		
+ Business conduct, consumer/investor protection	Integrated supervisory examinations Consumer/investor protection issues could signal some broader weaknesses, including prudential	Risk of subordinating investors' interests to a bank's solvency and profitability		
+ Monetary policy (banking supervisor is the central bank)	Integrated liquidity, solvency and payment system oversight Better knowledge of transmission mechanism of monetary policy	Biases in monetary policy decisions Reputational risk		
+ Macroprudential policy	Integrated financial stability assessment	Risk of subordinating macroprudential to microprudential objectives		
+ Resolution of banks	Integrated crisis prevention and management Similar required technical capacity and better knowledge of institution	Risk of forbearance (ie delaying the trigger of resolution)		

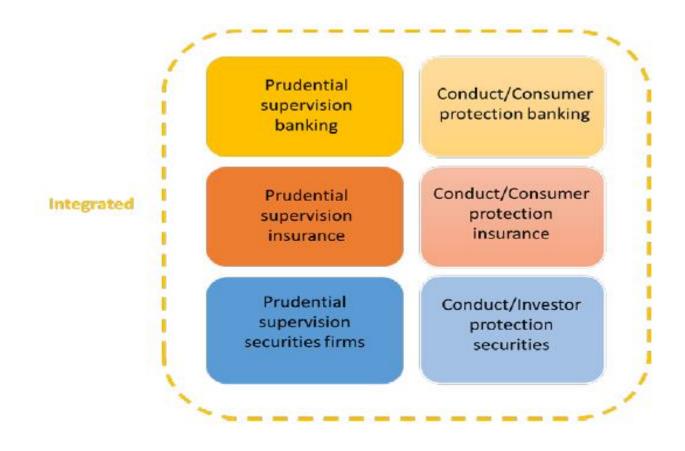
#### Sectoral model

One financial sector authority is responsible for the prudential and conduct of business supervision of each sector



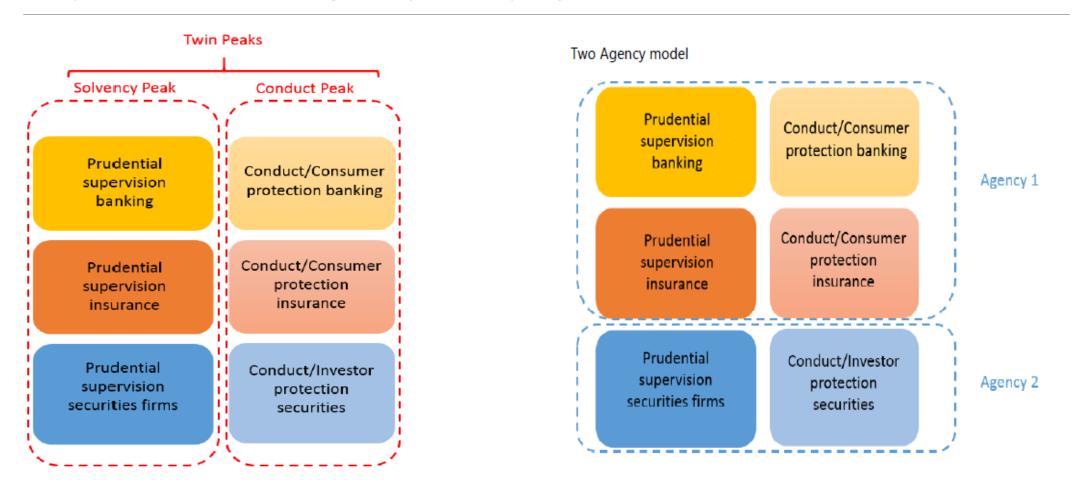
#### Integrated model

Single agency is responsible for all oversight functions in all three sectors



#### Partially integrated models

Responsibilities according to supervisory objectives or sectors



### III. Post-crisis financial supervisory models

# The prevailing model of financial sector supervision is still sectoral (50%) The integrated model is employed by 30%

### Model of supervision by region (percentage, rounded)

Table 2

	A	Africa	Am	erica	Asia 8	R Pacific	Eu	rope	Midd	lle East	To	otal
		•		•		•		•		•		•
Sectoral	9	100%	9	52%	7	50%	10	30%	4	66%	39	50%
Integrated-CB	0	0%	1	6%	2	14%	5	15%	1	17%	9	11%
Integrated-SSA	0	0%	1	6%	2	14%	11	33%	0	0%	14	18%
Two Agency	0	0%	3	18%	1	8%	4	12%	1	17%	9	11%
Twin Peaks	0	0%	3	18%	2	14%	3	10%	0	0%	8	10%
Total	9	100%	17	100%	14	100%	33	100%	6	100%	79	100%

#### 11 out of 79 jurisdictions have changed their supervisory model

Some jurisdictions have adjusted their existing supervisory model to improve the monitoring of financial stability and incorporate new functions, such as macroprudential policies and resolution, as well as to strengthen the coordination among the financial regulators

Changes	in the model o	f financial	sector super	vision			Table 3	
	•		Current					
	To From	Sectoral	Integrated- CB	Integrated- SSA	Twin Peaks	Two Agency	Total pre-GFC	
	Sectoral	39	1	3	1	2	46	
	Integrated- CB	0	6	0	0	0	6	
Pre-GFC	Integrated- SSA	0	2	11	2	o	15	
	Twin Peaks	0	0	0	5	0	5	
	Two Agency	0	0	0	0	7	7	
	Total current	39	9	14	8	9	79	
	•				_			
		Total change	25	11	_			

### 7 out of 19 jurisdictions (37%) have changed their supervisory model

Changes in model of financial sector supervision in crisis countries						Table 4			
			Current						
	From	Sectoral	Integrated- CB	Integrated - SSA	Twin Peaks	Two Agency	Total pre-GFC		
	Sectoral	5	1	1	0	1	8		
	Integrated-CB	0	0	0	0	0	0		
Pre-GFC	Integrated- SSA	o	2	5	2	o	9		
	Twin Peaks	0	0	0	1	0	1		
	Two Agency	0	0	0	0	1	1		
	Total current	3	6	5	3	2	19		
						•			
		Total changes		7					

# IV. Microprudential supervision

Central banks remain the predominant primary microprudential banking supervisor Insurance companies and securities business are mostly supervised by an SSA

# Current organisation of microprudential supervision<sup>27</sup>

Table 5

	Banking		Ins	urance	Securities/investment firms	
Central bank	54	66%	22	28%	13	17%
Separate supervisory agency	28	37%	52	65%	63	82%
Government department	0	0%	6	7%	1	1%
Total	82	100%	80	100%	77	100%

Few changes with respect to the location of the primary microprudential supervisor of banks since the GFC.

Change	s in the primary microprudentia	l authority for ban	king supervision	Table 6
		Cu	rrent	
	From	Central bank	Separate supervisory agency	Total pre-GFC
	Central bank	48	1	49
Pre-GFC	Separate supervisory agency	5	27	32
	Government department	1	0	1
	Total current	54	28	82
		Total changes	7	

The main change in the supervision of the insurance sector has been the migration from an SSA to the central bank.

Changes in the primary microprudential authority for insurance supervision

Table 7

			Current		
	From	Central bank	Separate supervisory agency	Government department	Total pre-GFC
	Central bank	14	0	0	14
Pre-GFC	Separate supervisory agency	7	49	0	56
	Government department	1	3	6	10
	Total current	22	52	6	80

Total changes 11

Few changes have been observed since the GFC in the location of the microprudential supervisor for securities firms.

Changes in the primary microprudential authority for securities/investment services firms

Table 8

	To From	Central bank	Separate supervisory agency	Government department	Total pre-GFC
	Central bank	8	0	0	8
Pre-GFC	Separate supervisory agency	5	62	0	67
	Government department	0	1	1	2
	Total current	13	63	1	77

Total changes 6

# V. Macroprudential policy

CBs are the leading authority for macroprudential policy in the largest number of jurisdictions

The allocation of the macroprudential function varies more in jurisdictions where a SSA is the microprudential bank supervisor

Primary autho	rity responsible for	macroprudential	policy		Table 13
Primary banking supervisor	Entity responsible for macroprudential policy	Recommendation only	Activation only	Recommendation and activation	Total
Central bank	Central bank	0	18	17	35
Central bank	Dedicated committee	5	0	5	10
	Central bank	1	1	3	5
Separate	Dedicated committee	7	1	3	11
supervisory agency	Separate supervisory agency	0	4	2	6
	Government department	0	2	2	4
Total		13	26	32	71

Dedicated committees are responsible for macroprudential supervision in a number of jurisdictions and typically include government representatives, central bankers and supervisory officials

Composition of a dedicated committee						Table 14
Composition of dedicated committees when it is the macroprudential authority						
Ministry or ministries	0	0	0	0	0	21
Central bank						20
Supervisory agency						19
Deposit insurance agency/authority						7
External experts						3
Total countries (21)	1	10	6	3	1	

Most jurisdictions have strengthened and continue to further develop their frameworks for financial stability monitoring

Changes in the setup of monitoring financial stability						Table 15
Creation of						Total
Dedicated committee (macroprudential authority)	0	•	•	0		21
Financial stability coordination committee						14
Financial stability unit or department			0	0	0	19
Total countries (45)	18	8	10	3	6	

VI. Financial supervisory architecture - EU and USA

#### **European Union**

- To further strengthen the supervisory structure in the EU, three European Supervisory Authorities (ESAs) were set up and started their operations in January 2011:
  - European Banking Authority (EBA)
  - European Securities and Markets Authority (ESMA), and
  - European Insurance and Occupational Pensions Authority (EIOPA)
- The European Systemic Risk Board (ESRB) was established to monitor and assess potential threats to financial stability that arise from macroeconomic developments and changes in the financial system
- The ESRB is responsible for macroprudential oversight of the financial system in the European Union and the prevention and mitigation of systemic risk

#### **United States of America**

- The supervisory structure has been strengthened after the GFC by focusing on financial stability and consumer protection. Dodd-Frank Act (2010) forms the basis for the creation of the inter-agency Financial Stability Oversight Council (FSOC) and the Consumer Financial Protection Bureau (CFPB). Both arrangements for financial oversight have a nationwide responsibility.
- FSOC: the objective is to monitor and identify emerging risks to financial stability across the entire financial system; identify potential regulatory gaps; and coordinate the microprudential agencies' response to potential systemic risks.
- The FSOC is chaired by the US Treasury Secretary and comprises the heads of the Fed,
   OCC, FDIC, CFPB, SEC, CFTC, FHFA and NCUA plus an independent member.

### VII. Conclusion

#### Conclusion

- Well-designed supervisory architecture contributes to strengthen the ability of financial authorities to prevent financial crises and mitigate their impact.
- Post-GFC, most jurisdictions have implemented incremental changes within their institutional arrangements for financial sector oversight. These changes respond to the adoption of the new macroprudential and resolution functions; a strengthening of consumer and investor protection; and improvements in financial stability monitoring.
- The post-GFC changes to financial supervisory models consist mainly in integrating supervisory functions and shifting more supervisory responsibilities to central banks.
- The regulatory and supervisory framework for business conduct has been strengthened worldwide.